

**Terrace**...an earth embankment, channel, or a combination ridge and channel constructed across the slope to intercept runoff water



Terraces, photo courtesy USDA – Natural Resources Conservation Service

## Purposes

This practice can be applied to support one of the following purposes:

- ☒ **To reduce soil erosion**
- ☒ **To retain runoff for moisture conservation**

## Benefits

When terraces are properly installed, soil erosion from steep slopes and sediment content in runoff water is greatly reduced. With this practice, runoff can also be managed for better moisture conservation and gully prevention. If seeded, permanent grasses on the front or back slopes of terraces serve as nesting habitat for wildlife.

## Applications

This practice applies to cropland but may also be used on wildlife or recreation lands where field crops are grown. Terraces can be used where soil erosion is a problem, where there is a need to conserve water, where the soils and topography are such that terraces can be constructed and farmed with reasonable effort, where a suitable outlet can be provided, or where excess runoff is a problem.

## Design and Installation

Terraces intercept runoff water and guide it to a safe outlet. Some terraces are designed to collect water and temporarily store it until it can filter into the ground or be released through a stable outlet. Other terraces are designed as a channel to slow runoff and carry it to a stable outlet such as a grassed waterway.

Terraces require careful design, layout, and construction. Many design factors for a terrace system depend on a field's existing topography, soil conditions, the crops grown, and farm machinery used. Consult an NRCS conservationist for site-specific recommendations.

After terrace construction, all areas requiring vegetation should be established as soon as possible to prevent soil erosion and to ensure stability of the terrace system.

## Maintenance

The terrace system should be periodically inspected, especially immediately following

runoff events. Promptly repair any damaged components. Terrace ridge height and outlet elevations should be maintained. In addition, to maintain capacity and a positive channel grade, remove any excess sediment that accumulates in the terraces or inlet structures.

All vegetation shall be maintained and trees and brush controlled by chemical or mechanical means. However, management practices should not disturb cover during the primary nesting period for grassland birds, March 1 through July 15. If livestock are permitted on vegetated land, a grazing plan should also be maintained.

## Relative Cost

**Installation**      low ●●●○○ high

**Maintenance**      low ●○○○○ high

## For Additional Information...

Visit the Minnesota NRCS office online at <http://www.mn.nrcs.usda.gov/>, see the Minnesota Field Office Technical Guide (FOTG) standard for (600) Terrace, or contact your local USDA-NRCS office.

*Local USDA-NRCS contact information*